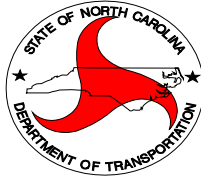


STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION



DIVISION 1 DISTRICT 2

CONTRACT PROPOSAL

WBS Element: 1C.008057
ROUTE: SR 1001 COUNTY: BERTIE
DESCRIPTION: FULL DEPTH RECLAMATION AND PAVING
BID OPENING: TUESDAY, MAY 30 AT 1:00 PM

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$50,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD OR SBE PROJECT. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA.

NAME OF BIDDER

N.C. CONTRACTOR'S LICENSE NUMBER

ADDRESS OF BIDDER

INSTRUCTIONS TO BIDDERS

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE PREPARING AND SUBMITTING YOUR BID.

All bids shall be prepared and submitted in accordance with the following requirements. Failure to comply with any requirement shall cause the bid to be considered irregular and shall be grounds for rejection of the bid.

1. The bid sheet furnished by NCDOT with the proposal shall be used and shall not be altered in any manner. **DO NOT SEPARATE THE BID SHEET FROM THE PROPOSAL!**
2. All entries on the bid sheet, including signatures, shall be written in ink.
3. The Bidder shall submit a unit price for every item on the bid form. The unit prices for the various contract items shall be written in figures.
4. An amount bid shall be entered on the bid sheet for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount Bid" column of the sheet.
5. The total amount bid shall be written in figures in the proper place on the bid sheet. The total amount shall be determined by adding the amounts bid for each item.
6. Changes in any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Bidder shall initial the change in ink.
7. The bid shall be properly executed. All bids shall show the following information:
 - a. Name of individual, firm, corporation, partnership, or joint venture submitting bid.
 - b. Name and signature of individual or representative submitting bid and position or title.
 - c. Name, signature, and position or title of witness.
 - d. Federal Identification Number (or Social Security Number of Individual)
 - e. Contractor's License Number (if Applicable)
8. Bids submitted by corporations shall bear the seal of the corporation.
9. The bid shall not contain any unauthorized additions, deletions, or conditional bids.
10. The bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
11. **THE PROPOSAL WITH THE BID SHEET STILL ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED IN THE Ahoskie District Engineer's Office at Building 230, NC 42 West, Aulander Highway, Ahoskie, N. C. 27910 By 1:00 PM On Tuesday, May 30, 2006**
12. The sealed bid must display the following statement on the front of the sealed envelope:
Quotation For WBS Element: 1C.008057 Full Depth Reclamation and Paving on SR 1001 in Bertie County to be Opened at 1:00 pm on Tuesday, May 30, 2006
13. If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope shall be addressed as follows:

**C. W. Bridgers, Jr., P. E.
N. C. Department of Transportation
230, NC 42 West
Ahoskie, N. C. 27910**

AWARD OF CONTRACT

The award of the contract, if it be awarded, will be made to the lowest responsible Bidder in accordance with Section 102 (*excluding 102-2 and 102-11*) of the Standard Specifications for Roads and Structures 2002. The lowest responsible will be notified that his bid has been accepted and that he has been awarded the contract. NCDOT reserves the right to reject all bids.

CONTENTS

Standard Provisions

- Authority of the Engineer
- Availability of Funds - Contract Termination
- Bankruptcy
- Bids
- Claims for Additional Compensation or Extension of Time
- Contract Payment and Performance Bond
- Contract Time and Holiday Limitations
- Contract Time and Liquidated Damages
- Intermediate Contract Time No. 1 and Liquidated Damages
- Cooperation with State Forces and Other Contractors
- Default of Contract
- Debarment Statement
- Engineering Control
- Erosion, Siltation, and Pollution Control
- Extension of Contract Time
- General
- Inspection
- Liability Insurance
- Maintenance of Project
- Materials and Testing
- Retainage and Prompt Payment
- Partial Payment
- Posted Weight Limits
- Prosecution and Progress
- Prosecution of Work
- Safety and Accident Protection
- Subletting of Contract
- Supervision by Contractor
- Temporary Suspension of Work
- Traffic Control and Work Zone Safety
- Utility Conflicts

Special Provisions

- Price Adjustment – Asphalt Binder for Plant Mix
- Adjustment of Valve Boxes, Manholes, and Meter Boxes
- Bituminous Paver
- Bituminous Plant Mix Incidental Items
- Damage to Existing Pavement, Base, Subgrade, and Proposed Pavement
- Driveways and Private Property
- Flexible Pavement Reclamation Using Portland Cement
- Minority and Women Business Enterprise (with goals)
- Mobilization
- Night Operations

Notification of Operations
Pavement Markings (By NCDOT)
Paving
Paving Intersections
Plan, Detail, and Quantity Adjustments
Pre-Construction Conference
Asphalt Pavements Superpave
Work Zone Signing

Vicinity Map

Typical Section

Form W-9

Non Collusion Affidavit

Listing of MB and WB Subcontractors

Division Contract Bid Form

CONTRACT STANDARD PROVISIONS

AUTHORITY OF THE ENGINEER

The Engineer for this project shall be the Division Engineer, Division 1, Division of Highways, North Carolina Department of Transportation, acting directly or through his duly authorized representatives.

The Engineer will decide all questions which may arise as to the quality and acceptability of work performed and as to the rate of progress of the work; all questions which may arise as to the interpretation of the contract; and all questions as to the acceptable fulfillment of the contract on the part of the Contractor. His decision shall be final and he shall have executive authority to enforce and make effective such decisions and orders as the Contractor fails to carry out promptly.

AVAILABILITY OF FUNDS - CONTRACT TERMINATION

Payments on this contract are subject to availability of funds as allocated by the General Assembly. If the General Assembly fails to allocate adequate funds, the Department reserves the right to terminate this contract.

In the event of termination, the Contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the Contractor shall be paid for the work already performed in accordance with the contract specifications.

BANKRUPTCY

The Department of Transportation, at its option, may terminate the contract upon filing by the Contractor of any petition for protection under the provisions of the Federal Bankruptcy Act.

BIDS

In accordance with GS 136-28.1(b), if the total bid amount of the contract exceeds \$1,200,000, the bid will not be considered for award.

CLAIMS FOR ADDITIONAL COMPENSATION OR EXTENSION OF TIME

Any claims for additional compensation and/or extensions of the completion date shall be submitted to the Division Engineer with detailed justification within thirty (30) days after receipt of the final invoice payment. The failure of the Contractor to submit the claim(s) within thirty days shall be a bar to recovery.

CONTRACT PAYMENT AND PERFORMANCE BOND

A performance bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the faithful performance of the contract in accordance with specifications and conditions of the contract is required for Construction contracts of \$300,000 or more. Such bond shall be solely for the protection of the North Carolina Department of Transportation and the State of North Carolina.

A payment bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the prompt payment for all labor or materials for which the Contractor, or his subcontractors, are liable is required for Construction contracts greater than \$300,000. The payment bond shall be solely for the protection of persons or firms furnishing materials or performing labor for this contract for which the The successful bidder, within fourteen (14) days after notice of award, shall provide the Department with a contract payment bond and a contract performance bond each in an amount equal to 100 percent of the amount of the contract.

CONTRACT TIME AND HOLIDAY LIMITATIONS

The Contractor shall not narrow or close a lane of traffic on any roads contained in the proposal, detain and/or alter the traffic flow on or during holidays, holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

Schedule work so that lane closures are not required during these periods, unless otherwise directed by the Engineer.

The following is a listing of Legal State holidays:

Good Friday	April 14, 2006	Friday
Memorial Day	May 29, 2006	Monday
Independence Day	July 4, 2006	Tuesday
Labor Day	September 4, 2006	Monday
Veteran's Day	November 10, 2006	Friday
Thanksgiving	November 23 & 24, 2006	Thursday & Friday
Christmas	December 25, & 26, 2006	Monday & Tuesday
New Year's Day	December 31, 2006	Friday

CONTRACT TIME AND LIQUIDATED DAMAGES

The date of availability for this project is July 10, 2006. The Contractor may begin work prior to this date upon approval of the Engineer or his duly authorized representative. If such approval is given, and the Contractor begins work prior to the date of availability, the Department of Transportation will assume no responsibility for any delays caused prior to the date of availability by any reason whatsoever, and such delays, if any, will not constitute a valid reason for extending the completion date.

No work will be permitted and no purchase order will be issued until all required bonds and prerequisite conditions and certifications have been satisfied.

The completion date for this project is October 20, 2006. No extensions will be authorized except as authorized by Article 108-10 of the Standard Specifications

Liquidated damages for this contract are Three Hundred Fifty Dollars (\$350.00) per calendar day. Contractor is liable.

INTERMEDIATE CONTRACT TIME No. 1 AND LIQUIDATED DAMAGES

The Contractor shall complete the work required of the **Full Depth Reclamation and Paving using required pavement design. Shoulder reconstruction may be done after the Intermediate Contract Time.**

The date of availability for Intermediate Contract Time No. 1 shall be the day the contractor begins the work included in this contract time.

The completion date for Intermediate Contract Time No. 1 shall be **Fourteen (14)** calendar days after the date of availability for Intermediate Contract Time No. 1.

Upon **Seven (7)** days written notice from the contractor, the Department will detour traffic and close SR 1001 for the above mentioned Fourteen (14) calendar days. The contractor may then proceed to perform the above mentioned work. The detour will be removed and the traffic will be placed in its original alignment at the end of the Fourteen (14) days, or when the above work has been satisfactorily completed, whichever comes first.

It will be the contractors responsibility to provide traffic control in accordance with the specifications, for any work conducted prior to, or after, Intermediate Contract Time No. 1.

The liquidated damages for Intermediate Contract Time No. 1 shall be **Five Hundred Dollars (\$500.00)** per day or any portion thereof.

COOPERATION WITH STATE FORCES AND OTHER CONTRACTORS

The Contractor must cooperate with State forces and other contractors working within the limits of this project as directed by the Engineer.

DEFAULT OF CONTRACT

108-9 of the Standard Specifications.

The Department of Transportation shall have the right to declare a default of contract for breach by the Contractor of any material term or condition of the contract. Default of contract shall be in accordance with the terms, conditions, and procedures of Article

DEBARMENT STATEMENT

The Contractor certifies and understands that by his/her signature on the Bid Form that he/she and the contracting firm he/she represents has not been banned, debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency.

ENGINEERING CONTROL

Engineering control and inspection will be by the North Carolina Department of Transportation. The Contractor will cut test samples as directed by the Engineer. The North Carolina Department of Transportation will set all necessary grades for pipe, ditches, or masonry drainage structures. All other field engineering will be the responsibility of the Contractor and considered as incidental to the project bid.

EROSION, SILTATION, AND POLLUTION CONTROL

The Contractor shall exercise every reasonable precaution and take all necessary measures throughout the life of the project to prevent erosion, siltation, and pollution in accordance with Section 107-13 of the Standard Specifications. Silt fence and erosion control measures shall be installed in

accordance with the plans for this project, Section 1605 of the Standard Specifications, and in locations directed by the Engineer or his representative.

EXTENSION OF CONTRACT TIME

Failure on the part of the Contractor to furnish bonds or certifications, or to satisfy preliminary requirements necessary to issue the purchase order will not constitute grounds for extension of the contract time. If the Contractor has fulfilled all preliminary requirements for the issuance of a purchase order, and the purchase order authorization is not available by the date of availability, the Contractor shall be granted an extension equal to the number of calendar days the purchase order authorization is delayed after the date of availability.

GENERAL

This contract is for **Full Depth Reclamation and Paving on SR 1001 in Bertie County. This project will include approximately 2350 tons of ACIC type I 19.0B, 1550 tons of SF 9.5A, 23,000 sq. yds. of Full Depth Reclamation, 600 cu. yds. of Borrow and 222 tons of Asphalt Binder Grade PG 64-22.**

All work and materials shall be in accordance with the provisions of the General Guidelines of this contract, the Project Special Provisions, the North Carolina Department of Transportation Standard Specifications for Roads and Structures, the North Carolina Department of Transportation Roadway Standards Drawings, and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD).

The Contractor shall keep himself fully informed of all Federal, State and local laws, ordinances, and regulations, and shall comply with the provisions of Section 107 of the Standard Specifications.

INSPECTION

All work shall be subject to inspection by the Engineer at any time. Routinely, the Engineer will make periodic inspections of the completed work. It will be the responsibility of the Contractor to keep the Engineer informed of his proposed work plan and to submit written reports of work accomplished on a frequency to be determined by the Engineer.

LIABILITY INSURANCE

The Contractor shall obtain from an insurance company, duly authorized to do business in North Carolina, Public Liability and Property Damage Insurance to protect his company and subcontractors performing work covered under this contract from claims which may arise from operations under this contract. Insurance coverage shall be maintained during the life of this contract and shall extend to operations performed by the Contractor or his subcontractors, and by anyone employed directly or indirectly by either of them.

Public Liability Insurance shall be in an amount not less than one million (\$1,000,000) for injuries, including accidental death, to any one person, and subject to the same limit for each person, in an amount not less than one million dollars (\$1,000,000.00) on account of one accident.

Property Damage Insurance shall be in an amount not less than five hundred thousand dollars (\$500,000.00)

Proof of insurance shall be furnished to the Engineer prior to beginning work.

MAINTENANCE OF PROJECT

The Contractor shall be responsible for maintaining the project as directed by Section 104-10 in the Standard Specifications.

MATERIALS AND TESTING

The Engineer reserves the right to perform all sampling and testing in accordance with Section 106 of the Standard Specifications and the Department's "Materials and Test Manual." However the Engineer may reduce the frequency of sampling and testing where he deems it appropriate for the project under construction.

The Contractor shall furnish the applicable certifications and documentation for all materials as required by the Standard Specifications. Material which is not properly certified will not be accepted.

Delivery tickets for all asphalt material shall be furnished in accordance with Section 106-7 of the Standard Specifications and shall include the following information:

1. NCDOT Work Order Number
2. Date
3. Time issued
4. Type of Material
5. Gross weight
6. Tare Weight
7. Net weight of material
8. Plant Location
9. Truck Number
10. Contractor's name
11. Public weighmaster's stamp or number
12. Public weighmaster's signature or initials in ink
13. Job mix formula number

RETAINAGE AND PROMPT PAYMENT

Prompt Payment of Monies Due Subcontractors, Second Tier Subcontractors and Material Suppliers and Release of Retainage

Contractors at all levels; prime, subcontractor, or second tier contractor, shall within seven calendar days of receipt of monies, resulting from work performed on the project or services rendered, pay subcontractors, second tier subcontractors, or material suppliers, as appropriate. This seven-day period begins upon knowledgeable receipt by the contracting firm obligated to make a subsequent periodic or final payment. These prompt payment requirements will be met if each firm mails the payment to the next level firm by evidence of postmark within the seven-day period.

This provision for prompt payment shall be incorporated into each subcontract or second tier subcontract issued for work performed on the project or for services provided.

The Contractor may withhold up to 3% retainage if any subcontractor does not obtain a payment and performance bond for their portion of the work. If any retainage is held on subcontractors, all retainage shall be released within seven calendar days of satisfactory completion of all work. For the purpose of release of retainage, satisfactory completion is defined as completion of all physical elements and corresponding documentation as defined in the contract, as well as agreement between the parties as to the final quantities for all work performed in the subcontract. The Department will provide internal controls to expedite the determination and processing of the final quantities for the satisfactorily completed subcontract portions of the project.

Failure of any entity to make prompt payment as defined herein may result in (1) withholding of money due to that entity in the next partial payment until such assurances are made satisfactory to this provision; or (2) removal of an approved contractor from the prequalified bidders list or the removal of other entities from the approved subcontractors list.

PARTIAL PAYMENT

The Contractor may submit a request for partial payment on a monthly basis, or other interval as approved by the Engineer. Compensation for all pay items shall be in accordance with the Standard Specifications. The amount of partial payments will be based on the work accomplished and accepted as the last day of the approved pay period. All requests for payment shall be made on the form furnished to the Contractor by the Department of Transportation. The form shall be completely and legibly filled out with all appropriate information supplied and shall be signed by an authorized representative of the Contractor. Minority Business (MB) and Women's Business (WB) participation shall be listed in the appropriate spaces on all requests for payment. If there is no participation the word "None" or the figure "0" shall be entered. An amount equal to five percent (5%) of the total amount due on the partial pay estimate will be deducted and retained until after the final inspection. One hundred percent (100%) payment shall be made after successful completion of the work as verified by the final inspection.

POSTED WEIGHT LIMITS

The Contractor's attention is directed to the fact that many primary and secondary roads and bridges are posted with weight limits less than the legal limit. The Contractor will not be allowed to exceed the posted weight limits in transporting materials or equipment to the project. The Contractor should make a thorough examination of all maps and haul routes on this project.

PROSECUTION AND PROGRESS

The Contractor shall pursue the work diligently with workmen in sufficient numbers, abilities, and supervision, and with equipment, materials, and methods of construction as may be required to complete the work described in the contract by the completion date and in accordance with Section 108 of the Standard Specifications.

The Contractor's operations are restricted to daylight hours. No work may be performed on Sundays and legal State holidays. Work shall only be performed when weather and visibility conditions allow safe operations.

The Contractor shall temporarily remove his equipment from the travelway for emergency vehicles and school buses as directed by the Engineer.

PROSECUTION OF WORK

The Contractor will be required to prosecute the work in a continuous and uninterrupted manner from the time he begins the work until completion and final acceptance of the project. The Contractor will not be permitted to suspend his operations except for reasons beyond his control or except where the Engineer has authorized a suspension of the Contractor's operations in writing.

SAFETY AND ACCIDENT PROTECTION

In accordance with Article 107-22 of the Standard Specifications, the Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

SUBLETTING OF CONTRACT

The Contractor shall not sublet, sell, transfer, assign or otherwise dispose of this contract or any portion thereof; or his right, title, or interest therein; without written consent of the Engineer. Subletting of this contract or any portion of the contract shall conform to the requirements of Article of 108-6 of the Standard Specifications.

SUPERVISION BY CONTRACTOR

At all times during the life of the project the Contractor shall provide one permanent employee who shall have the authority and capability for overall responsibility of the project and who shall be personally available at the work site within 24 hours notice. Such employee shall be fully authorized to conduct all business with the subcontractors, to negotiate and execute all supplemental agreements, and to execute the orders or directions of the Engineer.

At all times that work is actually being performed, the Contractor shall have present on the project one competent individual who is authorized to act in a supervisory capacity over all work on the project, including work subcontracted. The individual who has been so authorized shall be experienced in the type of work being performed and shall be fully capable of managing, directing, and coordinating the work; of reading and thoroughly understanding the contract; and receiving and carrying out directions from the Engineer or his authorized representatives. He shall be an employee of the Contractor unless otherwise approved by the Engineer.

The Contractor may, at his option, designate one employee to meet the requirements of both positions. However, whenever the designated employee is absent from the work site, an authorized individual qualified to act in a supervisory capacity on the project shall be present.

TEMPORARY SUSPENSION OF WORK

In accordance with Article 108-7 of the Standard Specifications, the Engineer will have the authority to suspend the work wholly or in part, any written order for such periods as he may deem necessary for any of the following reasons.

1. Conditions considered unfavorable for the suitable prosecution of the work, or
2. The Contractor's failure for correct conditions unsafe for workmen or the general public, or
3. The Contractor has not carried out orders given to him by the Engineer, or
4. The Contractor's failure to perform any provisions of the contract.

No extension of the completion date will be allowed for the above suspensions except as may be provided for in Article 108-10.

TRAFFIC CONTROL AND WORK ZONE SAFETY

The Contractor shall maintain traffic during construction and provide, install, and maintain all traffic control devices in accordance with these project guidelines, the Project Special Provisions, North Carolina Department of Transportation Standard Specifications for Roads and Structures, and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD).

The Contractor shall utilize complete and proper traffic controls and traffic control devices during all operations. All traffic control and traffic control devices required for any operation shall be functional and in place prior to the commencement of that operation. Signs for temporary operations shall be removed during periods of inactivity. The Contractor is required to leave the project in a manner that will be safe to the traveling public and which will not impede motorists.

Traffic movements through lane closures on roads with two way traffic shall be controlled by flaggers stationed at each end of the work zone. In situations where sight distance is limited, the Contractor shall provide additional means of controlling traffic, including, but not limited to, two-way radios, pilot vehicles, or additional flaggers. Flaggers shall be competent personnel, adequately trained in flagging procedures, and furnished with proper safety devices and equipment, including, but not limited to, safety vests and stop/slow paddles.

All personnel when working in traffic areas or areas in close proximity to traffic shall wear an approved safety vest, or shirt or jacket which meets the color requirements of the Manual of Uniform Traffic Control Devices (MUTCD).

The Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices,

and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

Failure to comply with any of the requirements for safety and traffic control of this contract shall result in suspension of work as provided in subarticle 108-7(2) of the Standard Specifications.

No direct payment shall be made for traffic control and work zone safety items, as they shall be considered incidental to other contract items.

UTILITY CONFLICTS

It shall be the responsibility of the Contractor to contact all affected utility owners and determine the precise locations of all utilities prior to beginning construction. Utility owners shall be contacted a minimum of 48 hours prior to the commencement of operations. Special care shall be used in working around or near existing utilities, protecting them when necessary to provide uninterrupted service. In the event that any utility service is interrupted, the Contractor shall notify the utility owner immediately and shall cooperate with the owner, or his representative, in the restoration of service in the shortest time possible. Existing fire hydrants shall be kept accessible to fire departments at all times.

The Contractor shall adhere to all applicable regulations and follow accepted safety procedures when working in the vicinity of utilities in order to insure the safety of construction personnel and the public.

DIVISION CONTRACT CONTRACT SPECIAL PROVISIONS

PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the Standard Specifications as modified herein.

The base price index for asphalt binder for plant mix is **\$301.43 per ton**.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on **April 1, 2006**.

ADJUSTMENT OF VALVE BOXES, MANHOLES, AND METER BOXES

Valve boxes, manholes, and meter boxes shall be adjusted in accordance with Section 858 of the Standard Specifications. This item consists of raising or lowering existing manholes and valve boxes to match the finished surface grade.

Adjustment to manholes, meter boxes, and valve boxes on this project shall be made by the use of an approved Rapid Set Grout, Mortar, or Concrete that will take full set and become load bearing within sixty minutes of placement. A list of approved materials will be furnished to the Contractor by the Resident Engineer.

The Contractor shall replace worn manhole rings and covers, worn meter box frames and covers, and worn valve box frames and covers, as directed by the Engineer, with a new ring/frame and cover assembly. These assemblies will be furnished at no cost to the Contractor by the Department or utility owner.

The Contractor shall construct a temporary ramp of bituminous plant mix around all structures that have been adjusted, unless otherwise directed by the Engineer.

Basis of payment will be under Adjustment of Manholes or Adjustment to Valve Boxes , per each.

BITUMINOUS PAVER

The Contractor's attention is directed to Article 610-8 of the Standard Specifications dealing with automatically controlled screeds on the bituminous pavement spreaders.

Pavers shall be equipped with a screed control system which will automatically control the longitudinal profile and cross slope of the pavement.

A mobile string line consisting of a 25 to 40 foot long ski will be required on this project.

BITUMINOUS PLANT MIX INCIDENTAL ITEMS

No separate payment shall be made for asphalt cement, non-strip additive, or field laboratory rental, as they shall be considered incidental to other items in the contract.

DAMAGE TO EXISTING PAVEMENT, BASE, SUBGRADE, AND PROPOSED PAVEMENT

In addition to the requirements of the Standard Specifications concerning this subject, the Contractor is cautioned that he will be held responsible for all damages to the pavement, base, and subgrade caused by his operations, including but not limited to, rutting and shoving of the existing or proposed pavement and yielding or rutting of the existing base and subgrade.

The Contractor is cautioned to limit the weight of his equipment and the frequency of hauls so as to not damage the existing pavement, base, subgrade and the proposed pavement.

Any subgrade or base failures which the Contractor finds prior to the beginning of his operations or during the conditioning of the existing base are to be brought to the attention of the Engineer in writing. Repairs to those areas will be made by DOT forces. Once these deficient areas have been repaired, the requirements of this Special Provision will fully apply.

DRIVEWAYS AND PRIVATE PROPERTY

The Contractor shall maintain access to driveways for all residents and property owners throughout the life of the project.

The Contractor shall not perform work for private citizens or agencies in conjunction with this project or within the project limits of this contract. Any driveway paved by a Contractor which ties into a NCDOT system road being paved by the Contractor must be paved either prior to the road paving project or after its completion.

FLEXIBLE PAVEMENT RECLAMATION USING PORTLAND CEMENT

SECTION 541

NOTE: FULL DEPTH RECLAMATION TO BE PERFORMED AT TWELVE (12) INCHES DEPTH. CEMENT TO BE ADDED AT A RATE OF 65LB. PER SQUARE YARD.

541-1 DESCRIPTION.

Perform the work covered by this section, including but not limited to, reclamation of roadway by pulverizing, treating with Portland Cement, mixing, and compacting the existing asphalt pavement, base, subbase, and subgrade materials to a specified depth to produce a uniform mixture which meets density requirements.

541-2 MATERIALS

Refer to Division 10:
Portland Cement, Type I, II, 1S.....Article
1024-1
Water.....Article
1024-4

Use asphalt, base, subbase and subgrade material existing in the area, or other materials proportioned by the Engineer, that is free from vegetation, roots, or other objectionable matter, and does not contain asphalt, aggregate or stone larger than 2 inches (50.8 mm).

541-3 LIMITATIONS

Do not perform flexible pavement reclamation when the air temperature is below 40°F (5°C.) in the shade or when conditions indicate that the temperature may fall below 40°F (5°C.) Do not place or mix materials with frozen subgrade. Protect the base from freezing for a period of 7 days after completion. Perform the work and meet density requirements only during daylight hours of the day the section was started, except as otherwise provided-for in special provisions or traffic control plans. If the work is interrupted for more than 30 minutes after cement has been added, or if rain causes excessive moisture, reconstruct the entire section and provide the cement required at no cost to the Department. Regulate operations to limit the application of cement to sections small enough so that all of the mixing, compacting, and finishing operations can be completed within the required time limit of three (3) hours.

541-4 CONSTRUCTION REQUIREMENTS

(A) EQUIPMENT.

A self-propelled reclaimer, with a minimum of 400 hp, capable of fully reclaiming the existing road to a depth of 12 inches and no less than 6.5 feet wide, is required. The reclaimer is also required to have a metered full-width spray bar system for adding water directly into the milling drum, and a breaker bar for use in conjunction with the milling drum.

A cement spreader that has an adjustable rate of flow and the capability of spreading the required amount of cement in one pass. Correct any leakage of fluids and/or materials promptly or the Engineer may order such equipment removed and replaced with satisfactory equipment. Use equipment and methods for applying cement and water that will not damage the roadway and meets the requirements of Article 107-22 (Safety and Accident Protection).

A motor grader equipped with a cross slope indicator, and capabilities to perform aeration, mixing, spreading and final shaping.

Water truck capable of nursing water into the reclaimer.

Water truck for adjusting moisture content and for wetting the curing reclaimed sections.

Self-propelled compaction equipment consisting of vibratory sheeps-foot, vibratory smooth-drum, and pneumatic tire rollers.

Details of the asphalt reclaimer shall be submitted to the Engineer for review at least five calendar days before the machine is brought onto the project site.

(B) LENGTH OF ROADWAY ALLOWED TO BE PROCESSED.

Except by written permission of the Engineer, the length of roadway pulverized will not exceed the length that can: be completely pulverized, mixed, graded, compacted, pass density, cured and protected against damage by normal anticipated traffic in the same working day.

(C) INITIAL PULVERIZING AND MIXING.

The pulverizing and mixing shall breakup the existing roadway to the specified depth to the extent that 100% weight passes a 2-inch sieve and a minimum of 50% passes a No. 4 sieve. The moisture content shall be maintained at a point that is at or below the optimum moisture content shown on the plans unless approved otherwise by the Engineer.

(D) SPREADING AND MIXING

Apply the required quantity of cement, as established by the Engineer, in a uniform spread on the pulverized roadway and immediately blend water and cement until uniformly distributed throughout the base mixture. Apply cement on days when wind will not interfere with spreading. Multiple mixing passes may be necessary to obtain thorough blending. Have the moisture content at or below the optimum moisture at the time of application of cement.

At the time of final mixing and during compaction, maintain the moisture content within a range of optimum to optimum plus 1.5% as determined. Make sure that the moisture content in the mix does not exceed the quantity that will cause the base course to become unstable during compaction or finishing operations.

541-5 COMPACTION

Begin compaction immediately after cement and water has been incorporated into the base. During compaction, maintain the moisture content of the material within a range of optimum to optimum plus 1.5%. Initial shaping may be required to obtain uniform compaction and required grade and cross-section. Initial compaction of the base should be performed with an approved self-propelled, vibratory sheep's-foot roller, to be followed by a vibratory smooth-drum roller and a pneumatic-tired roller. Compact to a density equal to at least 97% of the maximum density obtained by compaction of a material sample in accordance with AASHTO T-99, Method D, as determined by the Department.

After uniformly compacting the mixture, grade to required shape and cross-slope. Deficient areas needing additional material should be scarified before the addition of material, then compacted to density requirements, and graded to required shape and cross-slope. Copies of the testing procedures are available upon request from the Materials and Tests Unit. The Engineer may, at his option, utilize nuclear methods, as described in the current NCDOT Nuclear Gauge Operators Manual, to determine the density of the base in conjunction with the methods required above. Copies of this manual are available upon request from the Materials and Tests Unit.

Complete final compaction, including that necessary due to correction of high or low areas, within 3 hours after water has been added to the mixture. Do not leave any cement-roadway mixture undisturbed for more than 30 minutes if it has not been compacted and finished. When rain causes excessive moisture, or the 3-hour time limit is exceeded, reconstruct the entire section. When such reconstruction is necessary, perform the work of reconstruction, and provide the cement required, at no cost to the Department. The amount of cement to be used in reconstruction is 50% of the original rate. The finished surface shall be kept moist until either the curing seal, another surface treatment, or the next pavement course is applied.

541-6 CONSTRUCTION JOINTS

At the end of each day's construction, form a straight transverse construction joint by cutting back into the completed work to form a vertical face unless the road is to be opened to traffic. Build the base for large, wide areas in a series of parallel lines of convenient length and width meeting the approval of the Engineer. Form straight longitudinal joints at the edge of each day's construction by cutting back into the completed work to form a vertical face free of loose or shattered materials.

541-7 TOLERANCES

After final shaping and compacting of the base, the Engineer will check the surface of the base for conformance to the grade and typical section and determine the base thickness. Construct the thickness of the base so that it is within a tolerance of plus or minus $\frac{1}{2}$ Inch (12.7mm) of the base thickness required by the plans. Construct the base so that the maximum differential between the established grade and the base within any 50-foot (15-meter) section is $\frac{1}{2}$ inch (12.7mm)

541-8 TRAFFIC.

Completed sections of the base may be opened when necessary to lightweight local traffic, provided the base has hardened sufficiently to prevent marring or distorting of the surface, and provided the curing is not impaired. Do not operate construction equipment on the base except as necessary to discharge into the spreader during paving operations.

541-9 MAINTENANCE.

Maintain the base in an acceptable condition until final acceptance of the project. Include immediate repair of any defects or damage that may occur in any maintenance operation. Perform this maintenance at no cost to the Department and repeat as often as may be necessary to keep the base in an acceptable condition. Perform repairs to the base by replacing the base for its full depth.

541-10 METHOD OF MEASUREMENT AND PAYMENT

Flexible Pavement Reclamation will be measured in units of square yards. The length will be measured along the surface of the pavement. The width shall be the width specified on the plans or in writing by the Engineer.

(a) Unit Price Coverage

The contract unit price for Flexible Pavement Reclamation shall be the full price for furnishing all materials (cement, water), equipment, tools, labor, and incidentals necessary to complete the work.

(b) Payment Will Be Made Under Item No.

Flexible Pavement Reclamation – per square yard.

MINORITY AND WOMEN BUSINESS

POLICY

It is the policy of the North Carolina Department of Transportation that minority and women businesses shall have the maximum opportunity to participate in the performance of contracts financed by Non-Federal Funds.

The Contractor is also encouraged to give every opportunity to allow MBE/WBE participation in Supplemental Agreements.

OBLIGATION

The Contractor and any subsequent Subcontractor shall ensure that minority and women businesses have the maximum opportunity to participate in the performance of the work included in this contract. The Contractor and any subsequent Subcontractor shall take all necessary and reasonable steps to ensure that minority and women businesses have the maximum opportunity to compete for and perform a portion of the work included in this contract and shall not discriminate on the basis of race, color, national origin or sex. Failure on the part of the Contractor to carry out the requirements set forth herein shall constitute a breach of contract and after proper notification, may result in award disqualification, termination of the contract, disqualification from bidding, or other appropriate remedy.

GOALS

Pursuant to the requirements of North Carolina General Statute 136-28.4, the following goals for participation are established for this contract:

Minority Business Enterprises 5 %
Women Business Enterprises 2%

The Contractor shall exercise all necessary and reasonable steps to ensure that Minority Businesses (MB) and Women Businesses (WB) participate in at least the percents of the contract as set forth above as goals for this contract.

LISTING OF MB AND WB SUBCONTRACTORS

All bidders, at the time the bid proposal is submitted, must also submit a listing of MB and WB participation on the appropriate form (or facsimile thereof) contained elsewhere in this proposal in order for the bid to be considered responsive. Bidders must indicate the total dollar value of MB and WB participation of the contract. In the event the bidder has no MB and WB participation, he is still required to indicate this on the forms by entering the word or number zero. Blank forms will not be deemed to represent zero participation. BIDS SUBMITTED WHICH DO NOT HAVE MB AND WB PARTICIPATION INDICATED ON THE APPROPRIATE FORM WILL NOT BE READ PUBLICLY DURING THE OPENING OF BIDS. These bids will not be considered for award by the Department and they will be returned to the bidder. Bidders have the option of submitting their MB and WB participation in an abbreviated format as required in Paragraph A below, or the bidders may submit their MB and WB participation in the additional detail required by Paragraph B below. In the event the bidder elects to submit MB and WB participation in accordance with Paragraph A and is determined to be the apparent lowest responsive bidder, that bidder must deliver to the Department no later than 12:00 noon of the sixth day following the opening of bids, a detailed MB and WB submittal as required by Paragraph B below.

Only those MB and WB firms with current certification by the Department will be considered acceptable for listing in the bidders submittal of MB and WB participation.

- A. The contractor shall indicate on the form for listing of MB and WB Subcontractors the following required information:

REQUIRED INFORMATION

- (1) The names of MB and WB firms committed to participate in the contract;
- (2) The Contract Item Numbers of work to be performed by each MB and WB firm; and
- (3) The total dollar amount to be paid to each MB and WB based on agreed upon unit prices.

Failure to indicate the required information on the specified form will cause the bid to be considered nonresponsive and it may be rejected.

- B. In lieu of submitting the information required by (A) above, the bidder may submit the detailed information required below along with the bid proposal form.

REQUIRED INFORMATION

- (1) The names of MB and WB firms committed to participate in the contract;
- (2) The Contract Item Numbers and Contract Item Descriptions and agreed upon unit prices of work to be performed by each MB and WB firm; and
- (3) The total dollar amount to be paid to each MB and WB based on agreed upon unit prices.

Failure to indicate the required information on the specified form will cause the bid to be considered nonresponsive and it may be rejected.

The Department will not allow any substitutions, deletions, or other alterations to the listing of firms committed for MB and WB participation and/or the respective listed contract item numbers after opening of bids. The Department will not allow adjustments to total dollar amount of MB and/or WB participation after the opening of bids which would result in the MB and/or WB participation being less than the contract goal. The only exceptions to the requirements of this paragraph will be: (1) to allow for replacement of a MB or WB firm that had been decertified after opening of bids, and (2) to allow alteration of the listed contract item numbers subject to the Bidder submitting sufficient documentation to verify an obvious error in the initial submittal.

- C. If the bid of the lowest responsive bidder exceeds \$500,000 and if the MB and/or WB participation submitted in response to Paragraph B exceeds the algebraic sum of the MB and WB goals by \$1000 or more, the excess will be placed on deposit by the Department for future use by the bidder. Separate accounts will be maintained for MB and WB participation and these may accumulate for a period not to exceed 24 months.

If the MB and WB participation submitted in response to Paragraph A/B does not meet or exceed the MB and WB contract goals, the apparent lowest responsive bidder must submit information to satisfy the North Carolina Department of Transportation that sufficient reasonable efforts have been made to meet the contract goals. One complete set and nine (9) copies of this information must be received in the office of the State Contractual Services Engineer no later than 12:00 noon of the sixth day following opening of bids. Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a sample representative letter along with a distribution list of the firms being solicited. Documentation of MB and WB quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Department considers in judging good faith efforts. This documentation may include written subcontractor quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

Where the bidder fails to provide this information by the deadline, the Department may impose the following sanctions: (1) disqualify the contractor and any affiliated companies from further bidding for a period of time of no more than 90 days from the date of disqualification as established in notification by certified mail; and (2) disqualify the Contractor and any affiliated companies for award of all contracts for which bids have been received and opened.

The following factors are what the Department will consider in judging whether or not the bidder has made adequate good faith effort:

- (1) Whether the bidder attended any pre-bid meetings that were scheduled by the Department to inform MBs and WBs of subcontracting opportunities;
- (2) Whether the bidder provided written notice to a reasonable number of specific MBs and WBs that their interest in the contract is being solicited and whether the firms solicited could have reasonably been expected to quote the work in the contract;
- (3) Whether the bidder followed up on initial solicitations of interests by contacting MBs and WBs to determine with certainty whether they were interested;
- (4) Whether the bidder selected portions of the work to be performed by MBs and WBs in order to increase the likelihood of meeting the contract goals;
- (5) Whether the bidder provided interested MBs and WBs with adequate information about the plans, specifications and requirements of the contract;
- (6) Whether the bidder negotiated in good faith with interested MBs and Wbs not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities;
- (7) Whether quotations were received from interested MB and WB firms but rejected as unacceptable without sound reasons why the quotations were considered unacceptable;
- (8) Whether the bidder made efforts to assist interested MBs and WBs in obtaining any required insurance or bonding that may be required by the bid proposal or by the bidder;
- (9) Whether the bidder specifically negotiated with Subcontractors to assume part of the responsibility to meet the contract MB and WB goal when the work to be sublet includes potential for MB and WB participation.

In the event one bidder is the apparent low bidder on two non-federally funded projects within the same letting located in the same geographic area of the state, as a part of the good faith effort the Department will consider allowing the bidder to combine the MB participation on the two projects so long as the overall MB goal value of both projects is achieved.

In the event one bidder is the apparent low bidder on two non-federally funded projects within the same letting located in the same geographic area of the state, as a part of the good faith effort the Department will consider allowing the bidder to combine the WB participation on the two projects so long as the overall WB goal value of both projects is achieved.

Where the apparent lowest responsive bidder fails to submit sufficient participation by MB firms to meet the contract goal, as part of the good faith effort the Department will consider allowing the bidder to withdraw funds to meet the MB goal so long as there are adequate funds available from the bidders MB bank account.

Where the apparent lowest responsive bidder fails to submit sufficient participation by WB firms to meet the contract goal, as part of the good faith effort the Department will consider allowing the bidder to withdraw funds to meet the WB goal so long as there are adequate funds available from the bidders WB bank account.

Where the apparent lowest responsive bidder fails to submit sufficient participation by MB and WB firms to meet the contract goal and upon a determination by the Goal Compliance Committee based upon the information submitted that the apparent lowest responsive bidder failed to make sufficient reasonable efforts to meet the contract goal, the Department may reject the bid.

In the event that the Department does not award the contract to the apparent lowest responsive bidder, the Department reserves the right to award the contract to the next lowest responsive bidder that can satisfy the Department that the contract goal can be met or that adequate good faith efforts have been made to meet the goal.

DIRECTORY OF CERTIFIED BUSINESSES

Only those MB firms with current certification with the Civil Rights Department may be used to meet the contract MB goal.

The listing of an individual firm certified by the Department shall not be construed as an endorsement of the firms capability to perform certain work.

REPLACEMENT OF MBs AND WBs

(A) Performance Related

If any MB or WB Subcontractor indicated on the form for listing of MB and WB Subcontractors, contained elsewhere in this proposal form, does not perform satisfactorily to the extent indicated or anticipated, the Contractor shall take all necessary, reasonable steps to replace the MB Subcontractor with another MB Subcontractor and/or the Contractor shall take all necessary, reasonable steps to replace the WB Subcontractor with another WB Subcontractor.

Any substitution of MB or WB firms after award of the contract shall be approved by the Department. The Contractor shall submit any requests for substitutions through the Resident Engineer and the request must provide a valid basis or reason for the proposed substitution.

To demonstrate necessary, reasonable efforts, the Contractor shall document the steps he has taken to replace any MB or WB Subcontractor that is unable to perform successfully with another MB or WB Subcontractor. Such documentation shall include but not be limited to the following:

- (a) Copies of written notification to MBs/WBs that their interest is solicited in subcontracting the work defaulted by the previous MB or WB Subcontractor or in subcontracting other items of work in the contract.
- (b) Efforts to negotiate with MBs and WBs for specific subbids including at a minimum:

- (1) The names, addresses, and telephone numbers of MBs and WBs that were contacted;
 - (2) A description of the information provided to MBs and WBs regarding the plans and specifications for portions of the work to be performed; and
 - (3) A statement of why additional agreements with MBs and WBs were not reached.
- (c) For each MB or WB contacted but rejected as unqualified, the reasons for the Contractor's conclusion.
 - (d) Efforts made to assist the MBs and WBs contacted, if needed, in obtaining bonding or insurance required by the Contractor.

Failure of the Contractor to demonstrate reasonable efforts to replace a MB or WB firm that does not perform as intended or anticipated, shall be just cause to disqualify the Contractor from further bidding for a period of up to 6 months after notification by certified mail.

(B) Decertification

- 1. If the Department has approved a Request for Subcontract for a particular MB or WB Subcontractor and that MB or WB Subcontractor is subsequently decertified by the Department; then the Department will not require the Prime Contractor to solicit replacement MB or WB participation equal to the remaining work to be performed by the decertified firm.
- 2. If a Prime Contractor has listed a MB or WB firm in his low bid submittal and the MB or WB firm is decertified prior to the Department approving a Request for Subcontract for the named MB or WB firm, the Prime Contractor may be required to make a good faith effort to:
 - (a) Replace the decertified firm with a certified firm, or
 - (b) To obtain replacement MB or WB participation in other areas of work.

DEFINITIONS

For purposes of this provision, the following definition will apply:

Minority Business or MB means a small business concern, which is owned and controlled by one or more minorities. Except that such term shall not include any concern or group of concerns controlled by the same minority or minorities which has average annual gross receipts over the preceding 3 fiscal years in excess of \$14,000,000, as adjusted by the Department for inflation. For the purposes of this part, owned and controlled means a business:

- (a) Which is at least 51 percent owned by one or more minorities or in the case of a publicly owned business, at least 51 percent of the stock of which is owned by one or more minorities; and

- (b) Whose management and daily business operations are controlled by one or more such individuals.

Minority is defined as a citizen or lawful permanent resident of the United States and who is:

- (1) Black (a person having origins in any of the black racial groups of Africa);
- (2) Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
- (3) Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands);
- (4) American Indian

Women Business or WB means a small business concern, which is owned and controlled by one or more women. Except that such term shall not include any concern or group of concerns controlled by the same woman or women which has average annual gross receipts over the preceding 3 fiscal years in excess of \$14,000,000, as adjusted by the Department for inflation. For the purposes of this part, owned and controlled means a business:

- (a) Which is at least 51 percent owned by one or more women or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and
- (b) Whose management and daily business operations are controlled by one or more of the women who own it.

COUNTING MB/WB PARTICIPATION TOWARD MEETING THE MB/WB GOAL

- (1) If a firm is determined to be an eligible MB or WB firm and certified by the Department, the total dollar value of the participation by the MB or WB will be counted toward the appropriate MB or WB goal. The total dollar value of participation by a certified MB or WB will be based upon unit prices agreed upon by the Prime Contractor and MB or WB Subcontractor.
- (2) The Contractor may count toward its MB or WB goal a portion of the total dollar value of participation with a joint venture, eligible under the standards of this provision, equal to the percentage of the ownership and controls of the MB or WB partner in the joint venture.
- (3) (a) The Contractor may count toward its MB or WB goal only expenditures to MBs or WBs that perform a commercially useful function in the work of a contract. A MB or WB is considered to perform a commercially useful function when it is responsible for execution of a distinct element of the work of a contract and carrying out its responsibilities by actually performing, managing, and supervising the work involved. To determine whether a MB or WB is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, and other relevant factors.

- (b) Consistent with normal industry practices, a MB or WB may enter into subcontracts. If a MB or WB Contractor or Subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of normal industry practices, the MB or WB shall be presumed not to be performing a commercially useful function. The MB or WB may present evidence to rebut this presumption to the Department. The Departments decision on the rebuttal of this presumption shall be final.
- (4) A Contractor may count toward its MB or WB goal 60 percent of its expenditures for materials and supplies required to complete the contract and obtained from MB or WB regular dealer and 100 percent of such expenditures to a MB or WB manufacturer.
 - (a) For purposes of this provision, a manufacturer is a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Contractor.
 - (b) For purposes of this provision, a regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. To be a regular dealer, the firm must engage in, as its principal business and in its own name, the purchase and sale of the products in question. A regular dealer in such bulk items as steel, cement, gravel, stone, and petroleum products need not keep such products in stock, if it owns or operates distribution equipment. Brokers and packagers shall not be regarded as manufacturers or regular dealers within the meaning of this section.
- (5) A contractor may count toward its MB or WB goal the following expenditures to MB or WB firms that are not manufacturers or regular dealers:
 - (a) The fees or commissions charged for providing a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials or supplies required for performance of the contract, provided that the fee or commission is determined by the Department to be reasonable and not excessive as compared with fees customarily allowed for similar services.
 - (b) The fees charged for delivery of materials and supplies required on a job site (but not the cost of the materials and supplies themselves) when the hauler, trucker, or delivery service is not also the manufacturer of or a regular dealer in the materials and supplies, provided that the fee is determined by the Department to be reasonable and not excessive as compared with fees customarily allowed for similar services.
 - (c) The fees or commissions charged for providing any bonds or insurance specifically required for the performance of the contract provided that the fee or commission is determined by the Department to be reasonable and not excessive as compared with fees customarily allowed for similar services.

REPORTS

Within 30 days after receipt of materials, supplies, or services from MBs or WBs, not otherwise documented by Request for Subcontracts (RS-1A/RS-1B), the Contractor shall furnish to the Engineer appropriate documentation (canceled checks, paid invoices, etc.) to verify expenditures with MB and WB concerns. The documentation should also indicate the percentage (60% or 100%) of expenditures claimed for MB or WB credit.

All requests for subcontracts involving MB or WB Subcontractors shall be accompanied by a certification executed by both the Prime Contractor and the MB or WB Subcontractor attesting to the agreed upon unit prices and extensions for the affected contract items. This document shall be on the Departments Form RS-1-D, or in lieu of using the Departments Form, copies of the actual executed agreement between the Prime Contractor and the MB or WB Subcontractor may be submitted. In any event, the Department reserves the right to require copies of actual subcontract agreements involving MB and WB Subcontractors.

The RS-1-D certification forms may be obtained from the Departments Resident Engineer.

These certifications shall be considered a part of the project records, and consequently will be subject to any penalties under State Law associated with falsifications of records related to projects.

REPORTING MINORITY BUSINESS ENTERPRISE OR WOMEN BUSINESS ENTERPRISE PARTICIPATION

When payments are made to Minority Business Enterprise firms or Women Business Enterprise firms, including material suppliers, contractors at all levels (prime, subcontractor, or second tier subcontractor) shall provide the Engineer with an accounting of said payments.

This accounting shall be furnished the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in (1) withholding of money due in the next partial pay estimate; or (2) removal of an approved Contractor from the prequalified bidders list or the removal of other entities from the approved subcontractors list. The accounting shall list for each payment made to a MB/WB Enterprise firm the following:

DOT Project Number
Payee Contractor Name
Receiving Contractor or Material Supplier
MB/WB Certification Basis, e.g., Woman Owned, Native American, African American, etc.
Amount of Payment
Date of Payment

A responsible fiscal officer of the payee contractor, subcontractor, or second tier subcontractor who can attest to the date and amounts of the payments shall certify that the accounting is correct. A copy of an acceptable report may be obtained from the Engineer.

MOBILIZATION

In Article 800-2 of the Standard Specifications, “Compensation”, is deleted; therefore; payment for Mobilization will be considered incidental to the various bid items.

NIGHT OPERATIONS

The Contractor may, with the approval of the Engineer, conduct his operations during night hours. For the purposes of this contract, night hours shall be defined as the period between dusk and dawn when natural light, as determined by the Engineer or his representative, is insufficient to safely and effectively perform contract operations.

If the Contractor elects to perform any phase of this contract during night hours, he shall submit, in writing, to the Engineer, a full and complete plan for traffic control and construction lighting which shall be approved prior to beginning construction.

All traffic control devices shall meet the requirements for night use as set forth in the North Carolina Department of Transportation Standard Specifications for Roads and Structures, North Carolina Department of Transportation Roadway Standards Drawings, and the current Manual of Uniform Traffic Control Devices (MUTCD).

NOTIFICATION OF OPERATIONS

The Contractor shall notify the Engineer one week in advance of beginning work on this project. The Contractor shall give the Engineer sufficient notice of all operations for any sampling, inspection or acceptance testing required. It should be noted that grading, draining, and stabilizing operations on the subject routes will be performed by Departmental Forces. All routes may not be available by the above listed date.

PAVEMENT MARKINGS

Pavement markings will be installed by North Carolina Department of Transportation forces.

PAVING

The production, delivery, placement, and compaction of all bituminous material shall be in accordance with Section 610 of the Standard Specifications. A currently approved North Carolina Department of Transportation job mix formula shall be used for all bituminous construction.

The air temperature 48 continuous hours prior to paving must be above 32 degrees Fahrenheit. Air temperature at the time of paving shall be in accordance with Subarticle 610-4 of the Standard Specifications.

The Contractor shall compact the Bituminous material on this project in accordance with Subarticle 610-9 of the Standard Specifications and the following provision:

Pavement shall not be placed until the base has been approved by the Engineer or his representative. A North Carolina Department of Transportation inspector shall be present during the placement of bituminous material.

The Contractor shall use a stringline or other approved method to establish a uniform consistent line to locate the edge of pavement. It shall be the Contractor's responsibility to place such line, but it shall meet the approval of the Engineer or his representative.

PAVING INTERSECTIONS

The Contractor shall surface all intersections, cul-de-sacs, and turn-arounds on this project as directed by the Engineer. When so directed, the Contractor shall surface the intersection back from the edge of pavement of the main line of the project a minimum distance of fifty (50) feet, back to the ends of the radii, or as directed by the Engineer. The pavement placed in the intersection shall be of the same material and thickness as that placed on the main line of the project.

The base on the unpaved intersections will be placed and prepared for surfacing by State Forces.

PLAN, DETAIL AND QUANTITY ADJUSTMENTS

The Department reserves the right to make, at any time during the progress of the work, such alterations in plans or the details of construction as may be found necessary or desirable by the Engineer to complete the project.

PRECONSTRUCTION CONFERENCE

In accordance with Section 108-3 of the Standard Specifications, a preconstruction conference will be required prior to beginning work.

ASPHALT PAVEMENTS – SUPERPAVE

05-17-05 Rev 08/02/05

Revise the 2002 *Standard Specifications* as follows:

PRIME COAT

Page 6-2, **Article 600-9**

Delete the first paragraph and substitute the following:

The quantity of prime coat to be paid will be the number of gallons (liters) of prime coat material that has been satisfactorily placed on the roadway. Each distributor load of prime coat material delivered and utilized on the project will be measured. Deductions will be made from each measured tank of material for all material placed on

the roadway that exceeds the application rate established by the Engineer by more than 0.03 gallons per square yard (0.14 liters per square meter)

ASPHALT TACK COAT

Page 6-4, **Article 605-8**

Insert the following after paragraph one.

Take necessary precautions to limit the tracking and/or accumulation of tack coat material on either existing or newly constructed pavements. Excessive accumulation of tack may require corrective measures.

FIELD VERIFICATION AND JOB MIX FORMULA ADJUSTMENTS

Page 6-7, **Article 609-4**

Delete the first paragraph and substitute the following:

Conduct field verification of the mix at each plant within 30 calendar days prior to initial production of each mix design, when required by the Allowable Mix Adjustment Policy and when directed as deemed necessary.

Page 6-8, **Article 609-4**

Delete the first paragraph and substitute the following:

Retain records of these calibrations and mix verification tests, including Superpave Gyratory Compactor (SGC) printouts, at the QC laboratory. In addition, furnish copies, including SGC printouts, to the Engineer for review and approval within one working day after beginning production of the mix.

Page 6-8, **Article 609-4**

Add the following sentence at the end of the last paragraph:

Any mix produced that is not verified may be assessed a price reduction at the Engineer's discretion in addition to any reduction in pay due to mix and/or density deficiencies.

Quality control minimum sampling and testing schedule:

Page 6-8, **Subarticle 609-5(A)**

Delete the second sentence in the fourth paragraph and substitute the following:

This person is responsible for monitoring all roadway paving operations and all quality control processes and activities, to include stopping production or implementing corrective measures when warranted.

Page 6-9, **Subarticle 609-5(C)1**

Delete the second sentence in the second paragraph and substitute the following:

Retain the QC compacted volumetric test specimens for 5 calendar days, commencing the day the specimens are prepared.

Page 6-9, **Subarticle 609-5(C)2**

At the bottom of this page, delete the sentence directly above the Accumulative Production Increment and substitute the following:

Sample and test the completed mixture from each mix design at the following minimum frequency during mix production:

Page 6-10, **Subarticle 609-5(C)2**

In the first full paragraph on this page, add to the reference AASHTO T 168 “Modified”

Revise Items B, C, D and E on this page as follows:

- B. Gradation on Recovered Blended Aggregate from Mix Sample (AASHTO T 30 Modified) Grade on all sieves specified on JMF
- C. Maximum Specific Gravity (AASHTO T 209 or ASTM D 2041), optional (ASTM D 6857)
- D. Bulk Specific Gravity of Compacted Specimens (AASHTO T166), optional (ASTM D 6752), Average of 3 specimens at N_{des} gyrations (AASHTO T 312)
- E. Air Voids (VTM) (AASHTO T 269), Average of 3 specimens at N_{des} gyrations

Page 6-11, **Subarticle 609-5(C)2**

At the top of this page, delete Item B.,” Reclaimed Asphalt Pavement...” and substitute the following:

- B. Reclaimed Asphalt Pavement (RAP) Binder Content and Gradation (AASHTO T 308 Modified or T 164 and AASHTO T 30 Modified) (sampled from stockpiles or cold feed system at beginning of production and weekly thereafter). Have RAP approved for use in accordance with Article 1012-1(G). (Split Sample Required)

Page 6-11, **Subarticle 609-5(C)2**

Insert the following sampling and testing at the end of this Subarticle:

- F. Uncompacted Void Content of Fine Aggregate, AASHTO T 304, Method A (natural sand only). Performed at Mix Design and when directed as deemed necessary. (Split Sample Required)
- G. Reclaimed Asphalt Shingle Material (RAS) Binder Content and Gradation (AASHTO T 308 Modified or T 164 and AASHTO T 30 Modified) (sampled from stockpiles or cold feed system at beginning of production and weekly thereafter). Have RAS approved for use in accordance with Article 1012-1(F). (Split Sample Required)

CONTROL CHARTS

Page 6-11, **Subarticle 609-5(C)3**

Delete the first paragraph and substitute the following:

Maintain standardized control charts furnished by the Department at the field laboratory. For mix incorporated into the project, record full test series data from all regularly scheduled random samples or directed samples which replace regularly scheduled random samples, on control charts the same day the tests are obtained.

In addition, partial test series results obtained due to reasons outlined in Subarticle 609-5(C)2 will be reported to Quality Assurance personnel on the proper forms, but will not be plotted on the control charts.

Page 6-12, **Subarticle 609-5(C)3**

Delete item 3 in the list below the second full paragraph and substitute the following:

3. If failure to stop production after two consecutive moving averages exceed the warning limits occurs, but production does stop at a subsequent time, re-establish a new moving average beginning at the actual production stop point.

Page 6-12, **Subarticle 609-5(C)3**

Delete the first and second sentence in the third full paragraph and substitute the following:

In addition, re-establish the moving averages for all mix properties.

CONTROL LIMITS

Page 6-12, **Subarticle 609-5(C) 4**

At the bottom of this page, delete the table and substitute the following:

CONTROL LIMITS				
Mix Control Criteria	Target Source	Warning Limit	Moving Average Limit	Individual Limit
2.36mm Sieve	JMF	±4.0 %	±5.0 %	±8.0 %
0.075mm Sieve	JMF	±1.5 %	±2.0 %	±2.5 %
Binder Content	JMF	±0.3 %	±0.5 %	±0.7 %
VTM @ N _{des}	JMF	±1.0 %	±1.5 %	±2.0 %
VMA @ N _{des}	Min. Spec. Limit	-0.5%	-0.8%	-1.0%
P _{0.075} / P _{be} Ratio	Max. Spec. Limit	0.0	N/A	+0.4%
%G _{mm} @ N _{ini}	Max. Spec. Limit	N/A	N/A	+2.0%
TSR	Min. Spec. Limit	N/A	N/A	-15.0%

Allowable Retesting for Mix Deficiencies:

Page 6-14, **Subarticle 609-5C(7)**

In the first paragraph, insert the following as the fourth sentence:

The Contractor under the supervision of the Department's QA personnel will perform these retests.

FIELD COMPACTION QUALITY CONTROL

Page 6-15, **Subarticle 609-5(D)1**

In the last sentence of the third paragraph of this subarticle, insert the wording "and wedging as shown in the HMA/QMS Manual, " after the wording "temporary pavements"

Delete the first and second sentences in the fourth paragraph and substitute the following:

Base and intermediate mix types (surface mixes not included) utilized for pavement widening of less than 4.0 feet and all mix types used in tapers, irregular areas and intersections (excluding full width travel lanes of uniform thickness), will not be subject to the sampling and testing frequency specified above provided the pavement is compacted using approved equipment and procedures. However, the Engineer may require occasional density sampling and testing to evaluate the compaction process.

Page 6-16, **Subarticle 609-5(D)1**

Delete item number 2 at the top of this page. Item number 3 should be re-numbered as 2 after the specified deletion.

Pavement Samples (Cores)

Page 6-16, **Subarticle 609-5(D)(2)**

In the first paragraph, delete the second sentence and insert the following as the last sentence in that paragraph:

The use of a separator medium beneath the layer to be tested is prohibited.

LIMITED PRODUCTION PROCEDURE

Page 6-17, **Subarticle 609-5(D) 5**

Delete the first paragraph and substitute the following:

Proceed on limited production when, for the same mix type, one of the following items occur:

- (1) Two consecutive failing lots, excluding lots representing an individual resurfacing map or portion thereof.
- (2) Three consecutive failing lots, with each lot representing an individual resurfacing map or portion thereof.
- (3) Two consecutive failing nuclear control strips.

Pavement within each construction category (New and Other), as defined in Article 610-13, and pavement placed simultaneously by multiple paving crews will be evaluated independently for limited production purposes.

Delete the first sentence in the last paragraph and substitute the following:

If the Contractor does not operate by the limited production procedures as specified above, the two consecutive failing density lots, three consecutive failing lots with each lot representing an individual resurfacing map or portion thereof, or two consecutive failing nuclear control strips, whichever is applicable, and all mix produced thereafter will be considered unacceptable. Remove this material and replace with material that complies with the Specifications, unless otherwise approved.

DOCUMENTATION (RECORDS)

Page 6-18, **Subarticle 609-5(E)**

Delete the third and fourth sentence in the first full paragraph and substitute the following:

Maintain all QC records, forms and equipment calibrations for a minimum of 3 years from their completion date.

Delete the second full paragraph and substitute the following:

Falsification of test results, documentation of observations, records of inspection, adjustments to the process, discarding of samples and/or test results, or any other deliberate misrepresentation of the facts will result in the revocation of the applicable person's QMS certification. The Engineer will determine acceptability of the mix and/or pavement represented by the falsified results or documentation. If the mix and/or pavement in question is determined to be acceptable, the Engineer may allow the mix to remain in place at no pay for the mix, asphalt binder and other mix components. If the mix and/or pavement represented by the falsified results is determined not to be acceptable, remove and replace with mix, which complies with the Specifications. Payment will be made for the actual quantities of materials required to replace the falsified quantities, not to exceed the original amounts.

QUALITY ASSURANCE

Page 6-18, **Article 609-6**

In Item 1 under Plant Mix Quality Assurance, substitute “5 percent” for “10 percent”.

In Item 2 under Plant Mix Quality Assurance, substitute “sampling and testing procedures” for “tests”.

In Item 4 under Plant Mix Quality Assurance, add “for that increment” after the word “sample”.

In Item 5 under Plant Mix Quality Assurance, add “at a frequency equal to or greater than 10 percent of the QC sample frequency”; or

Insert the following after Item 5 under Plant Mix Quality Assurance:

6. By any combination of the above.

Delete the paragraph below Plant Mix Quality Assurance, and replace with the following:

The Engineer will conduct assurance tests on both split QC samples taken by the Contractor and verification samples taken by the Department. These samples may be the regular quality control samples or a sample selected by the Engineer from any location in the process or verification samples taken at random by the Department. The frequency will be equal to or greater than 5 percent of that required of the Contractor as stated in Subarticle 609-5(C)2. The Engineer may select any or all samples for assurance testing.

In Item 1 under Density Quality Assurance, delete the wording at the end of the sentence “at a frequency equal to or greater than 10 percent of the frequency required of the Contractor”.

In Item 3 under Density Quality Assurance, substitute 5 percent for 10 percent.

Page 6-19, **Article 609-6**

In Item 4 under Density Quality Assurance, add “at a frequency equal to or greater than 10 percent of the QC sample frequency.”

Insert the following after Item 4 under Density Quality Assurance:

5. By periodically directing the recalculation of random numbers for the Quality Control core or nuclear density test locations. The original QC test locations may be tested by QA and evaluated as verification tests.

LIMITS OF PRECISION

Page 6-19, **Article 609-6**

In the limits of precision table, delete the last three rows and substitute the following:

QA retest of prepared QC Gyratory Compacted

Volumetric Specimens	± 0.015
Retest of QC Core Sample	± 1.2% (% Compaction)
Comparison of QA Core Sample	± 2.0% (% Compaction)
QA Verification Core Sample	± 2.0% (% Compaction)
Nuclear Comparison of QC Test	± 2.0% (% Compaction)
QA Nuclear Verification Test	± 2.0% (% Compaction)

Delete the first paragraph below the Limits of Precision table and insert the following two paragraphs.

The Engineer will immediately investigate the reason for differences if any of the following occur:

1. QA test results of QC split sample does not meet above limits of precision, or
2. QA test results of QC split sample does not meet the individual test control limits or the specification requirements, or
3. QA verification sample test results exceed the allowable retesting tolerances.

If the potential for a pavement failure exists, the Engineer may suspend production, wholly or in part, in accordance with the requirements of Article 108-7 while the investigation is in progress. The Engineer's investigation may include, but not be limited to the following:

1. Joint testing of any remaining split samples
2. Review and observation of the QC technician's sampling and testing procedures,
3. Evaluation and calibration of QC testing equipment, and/or
4. Comparison testing of other retained quality control samples, and/or additional density core samples.

In the third sentence of the second paragraph below the limits of precision table, insert "or verification test results" after "quality assurance test results".

ASPHALT CONCRETE PLANT MIX PAVEMENTS – DESCRIPTION

Page 6-20, **Article 610-1**

Insert the following after the last paragraph:

A high frequency of asphalt plant mix, density, or mix and density deficiencies occurring over an extended duration of time may result in future asphalt, which is represented by mix and/or density test results not in compliance with minimum specification requirements, being excluded from acceptance at an adjusted contract unit price in accordance with Article 105-3. This acceptance process may apply to all asphalt produced and /or placed and may continue until the Engineer determines a history of quality asphalt production and placement is reestablished.

MATERIALS

Page 6-21, **Article 610-2**

Delete reference of Anti-strip additive (chemical) to **Article 1020-2** and substitute **Article 1020-8**.

COMPOSITION OF MIXTURES (MIX DESIGN AND JOB MIX FORMULA)

Page 6-21, **Subarticle 610-3(A)**

At the end of the second paragraph, add the following sentence:

In addition, submit Superpave gyratory compactor printouts for all specimens compacted at N_{des} and N_{max} during the mix design process.

Insert the following paragraph after the second paragraph:

For the final surface layer of the specified mix type, use a mix design with an aggregate blend gradation above the maximum density line on the 2.36 mm and larger sieves.

Insert the following at the end of the third paragraph:

When the percent of binder contributed from RAS or a combination of RAS and RAP exceeds 20 percent of the total binder in the completed mix, the virgin binder PG grade shall be one grade below (both high and low temperature grade) the binder grade specified in Table 610-2 for the mix type.

Delete the fourth paragraph and substitute the following:

For Type S 12.5D mixes, the maximum percentage of reclaimed asphalt material is limited to 15% and shall be produced using virgin asphalt binder grade PG 76-22. For all other recycled mix types, when the percentage of RAP is 15 percent or less of the total mixture, the virgin binder PG grade shall be as specified in Table 610-2 for the specified mix type. When the percentage of RAP is greater than 15 but not more than 25 percent of the total mixture, the virgin binder PG grade shall be one grade below (both high and low temperature grade) the specified grade for the mix type. When the percentage of RAP is greater than 25 percent of the total mixture, the Engineer will establish and approve the asphalt binder grade.

Page 6-22, **Subarticle 610-3(A)**

Insert the following sentence at the end of the Item 4:

If natural sand is utilized in the proposed mix design, determine and report the Uncompacted Void Content of the natural sand in accordance with AASHTO T-304, Method A.

Page 6-23, **Subarticle 610-3(A)**

Under the quantities of mix components insert the following sentence:

When requested by the Engineer, submit to the Department's Materials and Tests Unit, in Raleigh, six (6) Superpave Gyratory Compactor specimens compacted to a height of 75 mm and to a void content (VTM) of 4.0% +/- 0.5% for performance rut testing with the Asphalt Pavement Analyzer.

Delete Table 610-1 and associated notes. Substitute the following:

TABLE 610-1
SUPERPAVE AGGREGATE GRADATION DESIGN CRITERIA

Standard	Percent Passing Criteria (Control Points)											
Sieves	Mix Type (Nominal Maximum Aggregate Size)											
	4.75 mm (a)		9.5 mm (c)		12.5 mm (c)		19.0 mm		25.0 mm		37.5 mm	
(mm)	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
50.0											100.0	
37.5									100.0		90.0	100.0
25.0							100.0		90.0	100.0		90.0
19.0					100.0		90.0	100.0		90.0		
12.5			100.0		90.0	100.0		90.0				
9.5	100.0		90.0	100.0		90.0						
4.75	90.0	100.0		90.0								
2.36	65.0	90.0	32.0(b)	67.0(b)	28.0	58.0	23.0	49.0	19.0	45.0	15.0	41.0
1.18												
0.600												
0.300												
0.150												
0.075	4.0	8.0	4.0	8.0	4.0	8.0	3.0	8.0	3.0	7.0	3.0	6.0

- (a) For Type S 4.75A, a minimum of 50% of the aggregate components shall be manufactured material from the crushing of stone.
- (b) For Type SF 9.5A, the percent passing the 2.36mm sieve shall be a minimum of 60% and a maximum of 70%.
- (c) For the final surface layer of the specified mix type, use a mix design with an aggregate blend gradation above the maximum density line on the 2.36 mm and larger sieves.

Delete Table 610-2 and associated notes. Substitute the following:

TABLE 610-2
SUPERPAVE MIX DESIGN CRITERIA

	Design	Binder	Compaction Levels			Volumetric Properties (c)			
Mix	ESALs	PG							
Type	millions	Grade	No. Gyration @			VMA	VTM	VFA	%Gmm
(f)	(a)	(b)	N _{ini}	N _{des}	N _{max}	% Min.	%	Min. - Max.	@ N _{ini}
S-4.75A	<0.3	64 -22	6	50	75	20.0	7.0-15.0		
SF-9.5A	<0.3	64 -22	6	50	75	16.0	3.0 - 5.0	70 - 80	≤ 91.5
S-9.5B	0.3 - 3	64 -22	7	75	115	15.0	3.0 - 5.0	65 - 80	≤ 90.5
S-9.5C	3 - 30	70 -22	8	100	160	15.0	3.0 - 5.0	65 - 76	≤ 90.0
S-12.5C	3 - 30	70 -22	8	100	160	14.0	3.0 - 5.0	65 - 75	≤ 90.0
S-12.5D	> 30	76 -22	9	125	205	14.0	3.0 - 5.0	65 - 75	≤ 90.0
I-19.0B	< 3	64 -22	7	75	115	13.0	3.0 - 5.0	65 - 78	≤ 90.5
I-19.0C	3 - 30	64 -22	8	100	160	13.0	3.0 - 5.0	65 - 75	≤ 90.0
I-19.0D	> 30	70 -22	9	125	205	13.0	3.0 - 5.0	65 - 75	≤ 90.0
B-25.0B	< 3	64 -22	7	75	115	12.0	3.0 - 5.0	65 - 78	≤ 90.5
B-25.0C	> 3	64 -22	8	100	160	12.0	3.0 - 5.0	65 - 75	≤ 90.0
B-37.5C	> 3	64 -22	8	100	160	11.0	3.0 - 5.0	63 - 75	≤ 90.0
	<i>Design Parameter</i>					<i>Design Criteria</i>			
All	1. %G _{mm} @ N _{max}					≤ 98.0% (d)			
Mix	2. Dust to Binder Ratio (P _{0.075} / P _{be})					0.6 - 1.4			
Types	3. Retained Tensile Strength (TSR)					85 % Min. (e)			
	(AASHTO T 283 Modified)								

- Notes:**
- (a) Based on 20 year design traffic.
 - (b) When Recycled Mixes are used, select the binder grade to be added in accordance with Subarticle 610-3(A).
 - (c) Volumetric Properties based on specimens compacted to N_{des} as modified by the Department.
 - (d) Based on specimens compacted to N_{max} at selected optimum asphalt content.
 - (e) AASHTO T 283 Modified (No Freeze-Thaw cycle required). TSR for Type S 4.75A, Type B 25.0 and Type B 37.5 mixes is 80% minimum.
 - (f) Mix Design Criteria for Type S 4.75A may be modified subject to the approval of the Engineer

WEATHER, TEMPERATURE, AND SEASONAL LIMITATIONS FOR PRODUCING AND PLACING ASPHALT MIXTURES

Page 6-26, **Article 610-4, Table 610-3**

Delete the title of **Table 610-3** and substitute the following title:

ASPHALT PLACEMENT- MINIMUM TEMPERATURE REQUIREMENTS

In the first column, third row; delete reference to the ACSC Types S 9.5A and S 12.5B mix.

Add the following minimum placing temperatures for mix types S 4.75A and SF 9.5A.

Asphalt Concrete Mix Type	Minimum Air Temperature	Minimum Road Surface Temperature
ACSC, Type S 4.75A, SF 9.5A	40°F (5°C)	50°F (10°C)

SPREADING AND FINISHING

Page 6-32, **Article 610-8**

Insert the following after the second sentence within the sixth paragraph.

Take necessary precautions during production, loading of trucks, transportation, truck exchanges with paver, folding of the paver hopper wings, and conveying material in front of the screed to prevent segregation of the asphalt mixtures.

Page 6-32, **Article 610-8**

Delete the last paragraph beginning on this page and continuing on the next page and substitute the following:

Use pavers equipped with an electronic screed control that will automatically control the longitudinal profile and cross slope of the pavement. Control the longitudinal profile through the use of either a mobile grade reference(s), including mechanical, sonic and laser grade sensing and averaging devices, an erected string line(s) when specified, joint matching shoe(s), slope control devices or the approved methods or combination of methods. Unless otherwise specified, use a mobile grade reference system capable of averaging the existing grade or pavement over a minimum 30 foot (9.1 meter) distance or by non-contacting laser or sonar type ski with at least four referencing stations mounted on the paver at a minimum length of 24 feet. Establish the position of the reference system such that the average profile grade is established at the approximate midpoint of the system. The transverse cross-slope shall be controlled as directed by the Engineer.

Page 6-33, **Article 610-8**

Delete the second full paragraph on this page and substitute the following:

Use the 30 foot (9.1 meter) minimum length mobile grade reference system or the non-contacting laser or sonar type ski with at least four referencing stations mounted on the paver at a minimum length of 24 feet to control the longitudinal profile when placing the initial lanes and all adjacent lanes of all courses, including resurfacing and asphalt in-lays, unless other specified or approved. A joint matching device short (6 inch [152.4 mm] shoes) may be used only when approved.

At the end of the third full paragraph, add the following sentence:

Waiver of the use of automatic screed controls does not relieve the Contractor of achieving plan grades and cross-slopes.

Insert the following as the last paragraph:

Repair any damage caused by hauling equipment across structures at no additional cost to the Department.

DENSITY REQUIREMENTS

Page 6-34, **Article 610-10**,

Delete **Table 610-4** and substitute the following table and associated notes:

Table 610-4
MINIMUM DENSITY REQUIREMENTS

MIX TYPE	MINIMUM % of G_{mm}
SUPERPAVE MIXES	(Maximum Specific Gravity)
S 4.75A	85.0 ^(a,b)
SF 9.5A	90.0
S 9.5X, S 12.5X, I 19.0X, B 25.0X, B 37.5X	92.0

(a) All S 4.75A pavement will be accepted for density in accordance with Article 105-3

(b) Compaction to the above specified density will be required when the S 4.75 A mix is applied at a rate of 100 lbs/sy (55 kg/m²)

Page 6-34, **Article 610-10**

Delete the second paragraph and substitute the following:

Compact base and intermediate mix types (surface mixes not included) utilized for pavement widening of less than 4.0 feet (1.2 meters) and all mix types used in tapers, irregular areas and intersections (excluding full width travel lanes of uniform thickness), using equipment and procedures appropriate for the pavement area width and/or shape. Compaction with equipment other than conventional steel drum rollers may be necessary to achieve adequate compaction. Occasional density sampling and testing to evaluate the compaction process may be required. Densities lower than that specified in Table 610-4 will be accepted, in accordance with Article 105-3, for the specific mix types and areas listed directly above.

SURFACE REQUIREMENTS AND ACCEPTANCE

Page 6-35, **Article 610-12**

Delete the first paragraph and substitute the following:

Construct pavements using quality paving practices as detailed herein. Construct the pavement surface smooth and true to the plan grade and cross slope. Immediately correct any defective areas with satisfactory material compacted to conform with the surrounding area. Pavement imperfections resulting from unsatisfactory workmanship such as segregation, improper longitudinal joint placement or alignment, non-uniform edge alignment and excessive pavement repairs will be considered unsatisfactory and if allowed to remain in place will be accepted in accordance with Article 105-3.

When directed due to unsatisfactory laydown or workmanship, operate under the limited production procedures. Limited production for unsatisfactory laydown is defined as being restricted to the production, placement, compaction, and final surface testing (if applicable) of a sufficient quantity of mix necessary to construct only 2500 feet (750 meter) of pavement at the laydown width.

Remain on limited production until such time as satisfactory laydown results are obtained or until three consecutive 2500 foot (750 meter) sections have been attempted without achieving satisfactory laydown results. If the

Contractor fails to achieve satisfactory laydown results after three consecutive 2500 foot (750 meter) sections have been attempted, cease production of that mix type until such time as the cause of the unsatisfactory laydown results can be determined. As an exception, the Engineer may grant approval to produce a different mix design of the same mix type if the cause is related to mix problem(s) rather than laydown procedures.

Mix placed under the limited production procedures for unsatisfactory laydown or workmanship will be evaluated for acceptance in accordance with Article 105-3.

DENSITY ACCEPTANCE

Page 6-36, **Article 610-13**

Delete the second paragraph and substitute the following:

The pavement will be accepted for density on a lot by lot basis. A lot will consist of one day's production of a given job mix formula on a contract. As an exception, separate lots will be established when the one of the following occurs:

- (1) Portions of pavement are placed in both "New" and "Other" construction categories as defined below. A lot will be established for the portion of the pavement in the "New" construction category and a separate lot for the portion of pavement in the "Other" construction category.
- (2) Pavement is placed on multiple resurfacing maps, unless otherwise approved prior to paving. A lot will be established for each individual resurfacing map or portion thereof.
- (3) Pavement is placed by multiple paving crews. A lot will be established for the pavement placed by each paving crew.
- (4) Pavement is placed in different layers. A lot will be established for each layer.
- (5) Control strips are placed during limited production.

The Engineer will determine the final category and quantity of each lot for acceptance purposes.

Page 6-36, **Article 610-13**

Delete the first sentence in the third paragraph and insert the following:

The "New" construction category will be defined as pavements of uniform thickness, exclusive of irregular areas, meeting all three of the following criteria:

Delete the sixth paragraph and substitute the following:

A failing lot for density acceptance purposes is defined as a lot for which the average of all test sections, and portions thereof, fails to meet the minimum specification requirement. If additional density sampling and testing, beyond the minimum requirement, is performed and additional test sections are thereby created, then all test results shall be included in the lot average. In addition, any lot or portion of a lot that is obviously unacceptable will be rejected for use in the work.

Page 6-36, **Article 610-13**

Delete the last paragraph and substitute the following:

Any density lot not meeting minimum density requirements detailed in Table 610-4 will be evaluated for acceptance by the Engineer. If the lot is determined to be reasonably acceptable, the mix will be paid at an adjusted contract price in accordance with Article 105-3. If the lot is determined not to be acceptable, the mix will be removed and replaced with mix meeting and compacted to the requirement of these specifications.

BASIS OF PAYMENT, ASPHALT PAVEMENTS

Page 6-37, **Article 610-16**

Add the following to the second paragraph:

The quantity of hot mix asphalt pavement, measured as provided in Article 610-15, will be paid for at the contract unit prices per ton (metric ton) for “Asphalt Concrete Surface Course, Type S 4.75A, and SF 9.5A”.

Add the following to the payment item description:

Asphalt Concrete Surface Course, Type S 4.75A.....	Ton (Metric Ton)
Asphalt Concrete Surface Course, Type SF 9.5A.....	Ton (Metric Ton)

Delete reference to the Asphalt Concrete Surface Course, Types S 9.5A and S 12.5B in both the second paragraph and in the payment description.

ASPHALT BINDER FOR PLANT MIX - METHOD OF MEASUREMENT

Page 6-39, **Article 620-4**

Delete the first sentence of the second paragraph and substitute the following:

Where recycled plant mix is being produced, the grade of asphalt binder to be paid for will be the grade for the specified mix type as required in Table 610-2 unless otherwise approved.

OPEN-GRADED ASPHALT FRICTION COURSE CONSTRUCTION REQUIREMENTS

Page 6-43, **Article 650-5**

Add the following paragraph after the first paragraph:

Do not place open-graded asphalt friction course between October 31 and April 1 of the next year, unless otherwise approved. Place friction course, Type FC-1 mixes, only when the road surface temperature is 50°F (10°C) or higher and the air temperature is 50°F (10°C) or higher. The minimum air temperature for Type FC-1 Modified and FC-2 Modified mixes will be 60°F (15°C).

AGGREGATES FOR ASPHALT PLANT MIXES

Page 10-34, **Subarticle 1012-1(B)4**

Delete and substitute the following:

(4) Flat and Elongated Pieces:

Use coarse aggregate meeting the requirements of Table 1012-1 for flat and elongated pieces when tested in accordance with ASTM D 4791 (Section 8.4) on the No. 4 (4.75 mm) sieve and larger with a 5:1 aspect ratio (maximum to minimum) for all pavement types, except there is no requirement for Types S 4.75A, SF 9.5A, and S 9.5B.

Page 10-35, **Table 1012-1**

Delete **Table 1012-1** and substitute the following:

Table 1012-1
AGGREGATE CONSENSUS PROPERTIES^(a)

Mix Type	Course	Fine	Sand	Flat &
	Aggregate	Aggregate	Equivalent	Elongated
	Angularity ^(b)	Angularity		5 : 1 Ratio
		% Minimum	% Minimum	% Maximum
	ASTM D 5821	AASHTO T 304 Method A	AASHTO T 176	ASTM D 4791 Section 8.4
S 4.75 A		40	40	
SF 9.5 A S 9.5 B I 19.0 B B 25.0 B	75 / -	40	40	10 ^(c)
S 9.5 C S 12.5 C I 19.0 C B 25.0 C B 37.5 C	95 / 90	45	45	10
S 12.5 D I 19.0 D	100 / 100	45	50	10
OGAFC	100 / 100	N/A	N/A	10

- (a) Requirements apply to the course aggregate blend and/or fine aggregate blend
 (b) 95/90 denotes that 95% of the course aggregate (+No.4 or + 4.75mm sieve) has one fractured face and 90% has two or more fractured faces.
 (c) Does not apply to Mix Types SF 9.5 A or S 9.5 B

Page 10-36, **Subarticle 1012-1(C)1**

Insert the following after the fourth paragraph:

When natural sand is utilized in “C” or “D” level asphalt mixes, do not exceed the maximum natural sand percentage in the mix design and/or production aggregate blend detailed in Table 1012-1A.

Table 1012-1A

Uncompacted Void Content of Fine Aggregate AASHTO T 304 Method A	Maximum Percent Natural Sand Included in Mix Design and/or Production*
Less than 42.0	10
Equal to 42.0 to 44.9	15
Equal to 45.0 and greater	20

*Maximum percent natural sand may be exceeded with approval from Pavement Construction Engineer upon satisfactory evaluation of pavement performance testing

FINE AGGREGATE ANGULARITY

Page 10-36, **Subarticle 1012-1(C)6**

Delete reference to AASHTO TP 33 Method A and substitute AASHTO T 304, Method A.

Page 10-37, **Subarticle 1012-1(H)**

Delete this Subarticle. It is a duplicate of Subarticle 1012-1(F) located on Page 10-36.

ASPHALT BINDER

Page 10-46, **Article 1020-2**

Delete the first paragraph and substitute the following:

Use Performance Graded Asphalt Binder meeting the requirements of AASHTO M 320. See Article 610-3 for the specified grades. Submit a Quality Control Plan for asphalt binder production in conformance with the requirements of AASHTO R 26 to the Materials and Tests Unit.

SP6R01

WORK ZONE SIGNING

The Contractor shall install and maintain signing in accordance with Sections 1100 & 1200 of the North Carolina Department of Transportation (NCDOT) 1995 Standard Specifications for Roads and Structures, and the following provisions:

The advanced warning work zone signs (see Roadway Standard Drawing Nos. 1101.01, 1101.02 and 1110.01) to be installed at the project limits shall be furnished and installed by the Contractor prior to beginning of work and shall be removed by the Contractor upon final completion of the project. Any required lane closure signing (see NCDOT Roadway Standard Drawing Nos. 1101.01, 1101.11, 1102.02, and 1110.02) needed during the life of the project shall be furnished and installed by the Contractor and shall be removed at the end of the work period.

General work zone warning signs for resurfacing and/or milling such as “Rough Road” (W8-8 at 48” X 48”) (for milling only), “Uneven Pavement” (W8-15 at 48” X 48”), and “Low Shoulder” (W8-9 at 48” X 48”) signs shall be installed by the Contractor. The signs, posts and hardware will be furnished to the Contractor by State Forces. The appropriate signs shall be installed at 1 mile intervals starting at a minimum of 500 feet in advance of the condition for both directions of travel (undivided roadways only) and at any other points determined by the

Engineer. The “Low Shoulder” (W8-9 at 48” X 48”) signs shall be installed prior to any resurfacing in an area where shoulder construction will be performed. General work zone warning signs such as “Unmarked Pavement Ahead” (W16-10 at 48” X 48”) and “Do Not Pass” (R4-1 at 24” X 30”) shall also be installed by the Contractor. The signs, posts, and hardware will be furnished to the Contractor by State Forces. The signs shall be installed alternately at 1/2 mile intervals starting at a minimum of 500 feet in advance of the condition for both directions of travel (undivided roadways only) and at any other points determined by the Engineer. These signs shall be placed prior to the obliteration of any pavement markings. The Contractor shall be responsible for maintenance of all general work zone warning signs. When construction is completed in any given area of the project the Contractor shall relocate the State furnished signs to the next work site, as directed by the Engineer. The signs will be removed from the project by State Forces.

All work zone warning signs shall be erected no sooner than 3 days before beginning work on a particular map. Each work zone warning sign shall be erected separately and not on the same post(s) with any other sign except where an advisory speed plate or directional arrow is used. The signs may be erected and covered prior to three days before beginning work on a particular map.

No direct payment will be made for Work Zone Signing as such work will be considered incidental to the various other bid items in the Contract.

Form W-9 { Rev. 5-03}

161050003

Pursuant to Internal Revenue Service Regulations, vendors must furnish their Taxpayer Identification Number (TIN) to the State. If this number is not provided, you may be subject to a 20% withholding on each payment. To avoid this 20% withholding and to insure that accurate tax information is reported to the Internal Revenue Service and the State, please use this form to provide the requested information exactly as it appears on file with the IRS.

Legal Business Name

Mailing Address:

9 Digit Taxpayer Identification Number

Social Security Number

OR

Federal Employer Identification Number

Remit to Address:

(Remittance only to this address)

9 Digit Taxpayer Identification Number

Social Security Number

OR

Federal Employer Identification Number

Business Designation (Check one)

Individual SS#

Sole Proprietorship SS#

Partnership

Estate/Trust

Corporation / Fed ID#

Public Service Corp. Fed ID#

Governmental/Non-Profit

Under penalties of perjury, I declare that I have examined this request and to the best of my knowledge and belief, it is true, correct, and complete. The IRS has not notified me that I am subject to backup withholding for failure to report income.

Name (Print or Type)

Title (Print or Type)

*Must Sign

Signature

Date

Telephone Number

To avoid payment delays, completed form should be returned promptly to:

N.C. Department of Transportation
Fiscal / Commercial Accounts
1514 Mail Service Center
Raleigh, North Carolina 27699-1514

NON COLLUSION AFFIDAVIT

(To Be Executed and Returned with Quotation)

The person executing this bid solemnly swears (or affirms) that neither he, nor any official, agent, or employee of the bidder has entered into any agreement, restraint of free competitive bidding in connection with this bid.

NAME OF CONTRACTOR _____

SIGNATURE OF CONTRACTOR _____

NOTE - AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to me this the _____
day of _____ 20 ____.

NOTARY SEAL

(SIGNATURE OF NOTARY PUBLIC)

Of _____ County.

State of _____.

My Commission Expires: _____.

North Carolina Department of Transportation

BID FORM

WBS ELEMENT:1C.008057

DESCRIPTION FULL DEPTH RECLAMATION AND PAVING

County BERTIE

ITEM	SECT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT BID
1	610	I 19.0B	2350	TON		
2	610	SF 9.5A	1550	TON		
3	620	BINDER GR. PG 64-22	222	TON		
4	SP	FULL DERTH RECLAMATION	23000	SY		
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

***TOTAL BID FOR
PROJECT:*** _____

CONTRACTOR _____

ADDRESS _____

Federal Identification Number _____ Contractors License Number _____

Authorized
Agent _____ Title _____

Signature _____ Date _____

Witness _____ Title _____

Signature _____ Date _____

**THIS SECTION TO BE COMPLETED BY NORTH CAROLINA DEPARTMENT OF
TRANSPORTATION**

*This bid has been reviewed in accordance with Article 103-1 of the Standard Specifications for
Roads and Structures 2002.*

Reviewed by _____
_____ (date)

Accepted by NCDOT _____ *Division*
Engineer _____ (date)